

AMENDMENTS TO THE CLAIMS (THIS LISTING REPLACES ALL PRIOR LISTINGS):

1. (Currently Amended) A method comprising
receiving data packets at a communications node,
associating each of the received data packets with ~~one of a set of different~~ a service
~~classes~~ class,
transmitting outbound packets corresponding to the received data packets to recipients,
and
controlling ~~the~~ an order in which the outbound packets are transmitted to the recipients
based on ~~the~~ rates of transmission rate of the outbound packets and the service class associated
with each of the received data packets corresponding to the outbound of the packets.
2. (Currently Amended) The method of claim 1 in which the ~~transmitted~~ outbound
packets comprise physical layer packets.
3. (Original) The method of claim 1 in which the rates of transmission are controlled
based on a time-division multiplexing algorithm.
4. (Original) The method of claim 1 in which the node comprises a radio node of a
communications protocol.
5. (Original) The method of claim 4 in which the communications protocol
comprises HDR.
6. (Currently Amended) The method of claim 1 in which each service class is one of
a set of the different service classes of service conform that conforms to a differentiated services
architecture.
7. (Original) The method of claim 6 in which the differentiated services architecture
comprises DiffServ.
8. (Original) The method of claim 1 in which the service classes comprise at least
one expedited forwarding class and at least one assured forwarding class.
9. (Currently Amended) The method of claim 1 also including receiving a user-
defined minimum average forwarding percentage rate for at least one of the ~~different~~ service
classes.

10. (Currently Amended) The method of claim 9 in which the percentage comprises a percentage of ~~the~~ a total bandwidth of a link on which the outbound packets are transmitted.

11. (Currently Amended) The method of claim 1 in which the rate of ~~the~~ transmission rate of an outbound packet is determined by ~~the recipients~~ recipient.

12. (Currently Amended) The method of claim 11 in which the transmission rates are sent by the recipients using a feedback channel to the node.

13. (Currently Amended) The method of claim 1 in which ~~an~~ the order in which the packets are transmitted ~~of transmission of the packets~~ is controlled by two-level scheduling including a class level in which ordering is determined among the classes of service and a recipient level in which ordering is determined among the recipients associated with each class.

14. (Original) The method of claim 13 in which the recipient level uses the Qualcomm algorithm.

15. (Original) The method of claim 13 in which the class level scheduling is based on at least one of the following for each of the classes: a configured minimum average forwarding rate percentage for the class, an actual forwarding rate percentage recently received by the class, and a channel quality for the recipients that belong to the class and are selected to receive service by the recipient level scheduling.

16. (Original) The method of claim 13 in which the class level scheduling is done over a predetermined length window of time slots.

17. (Original) The method of claim 13 in which the class level scheduling includes a weighted round robin scheduling algorithm in which the weights correspond to channel quality of the recipients belonging to the respective classes.

18. (Previously Presented) The method of claim 13 in which the class level scheduling is based at least in part on a planned selection at the recipient level within each class.

19. (Original) The method of claim 18 in which the class level scheduling is based on a metric scaled by different scaling factors for different service classes.

20. (Original) The method of claim 19 in which the scaling factors for all service classes are adaptively adjusted to meet the MAFRP for the service classes.

21. (Original) The method of claim 18 in which the class level scheduling is based on a metric which is adaptively adjusted to meet the MAFRP for the service classes.

22. (Original) The method of claim 13 in which the class level scheduling selects a class from among a subset of the classes.

23. (Previously Presented) The method of claim 22 in which the members of the subset of classes are determined by pre-assigned schedule times.

24. (Original) The method of claim 13 in which the recipient level scheduling selects a recipient from among a subset of the recipients.

25. (Previously Presented) The method of claim 24 in which the members of the subset of recipients are determined by pre-assigned schedule times.

26. (Currently Amended) Apparatus comprising
a communications node configured to receive data packets, associate each of the received data packets with ~~one of a set of different service classes~~ a service class, transmit outbound packets corresponding to the received data packets to recipients, and control ~~the~~ an order in which the outbound packets are transmitted to the recipients based on ~~the rates of~~ transmission rate of the outbound packets and the service class associated with each of the received data packets corresponding to ~~of the~~ outbound packets.

27. (Currently Amended) A method comprising
receiving from a network operator values representing minimum average forwarding rate percentages for each of more than one distinct classes of service associated with transmission of packets from a radio node of a network to recipients, and
scheduling packets for transmission among the ~~different~~ distinct classes based on the received values.

28. (Currently Amended) The method of claim 1 in which ~~a~~ the rate of transmission rate of each of the outbound packets varies based on a quality of a channel that serves the recipient of the outbound packet.

29. (Currently Amended) The method of claim 28 in which the rate of transmission rate of each of the outbound packets varies based on an instantaneous quality of a channel that serves the recipient when a the outbound packet is to be transmitted.

30. (New) The method of claim 27 in which in which the percentage comprises a percentage of a total bandwidth of a link on which the packets are transmitted.

31. (New) The method of claim 27 further comprising
controlling an order in which the packets are transmitted to the recipients based on rates
of transmission and classes of service of the packets.

32. (New) The method of claim 31 in which the order in which the packets are
transmitted is controlled by two-level scheduling including a class level in which ordering is
determined among the classes of service and a recipient level in which ordering is determined
among the recipients associated with each class.

33. (New) The method of claim 31 in which the packets are schedule for
transmission based on at least one of the following for each of the classes: a configured
minimum average forwarding rate percentage for the class, an actual forwarding rate percentage
recently received by the class, and a channel quality for the recipients that belong to the class and
are selected to receive service by the recipient level scheduling.